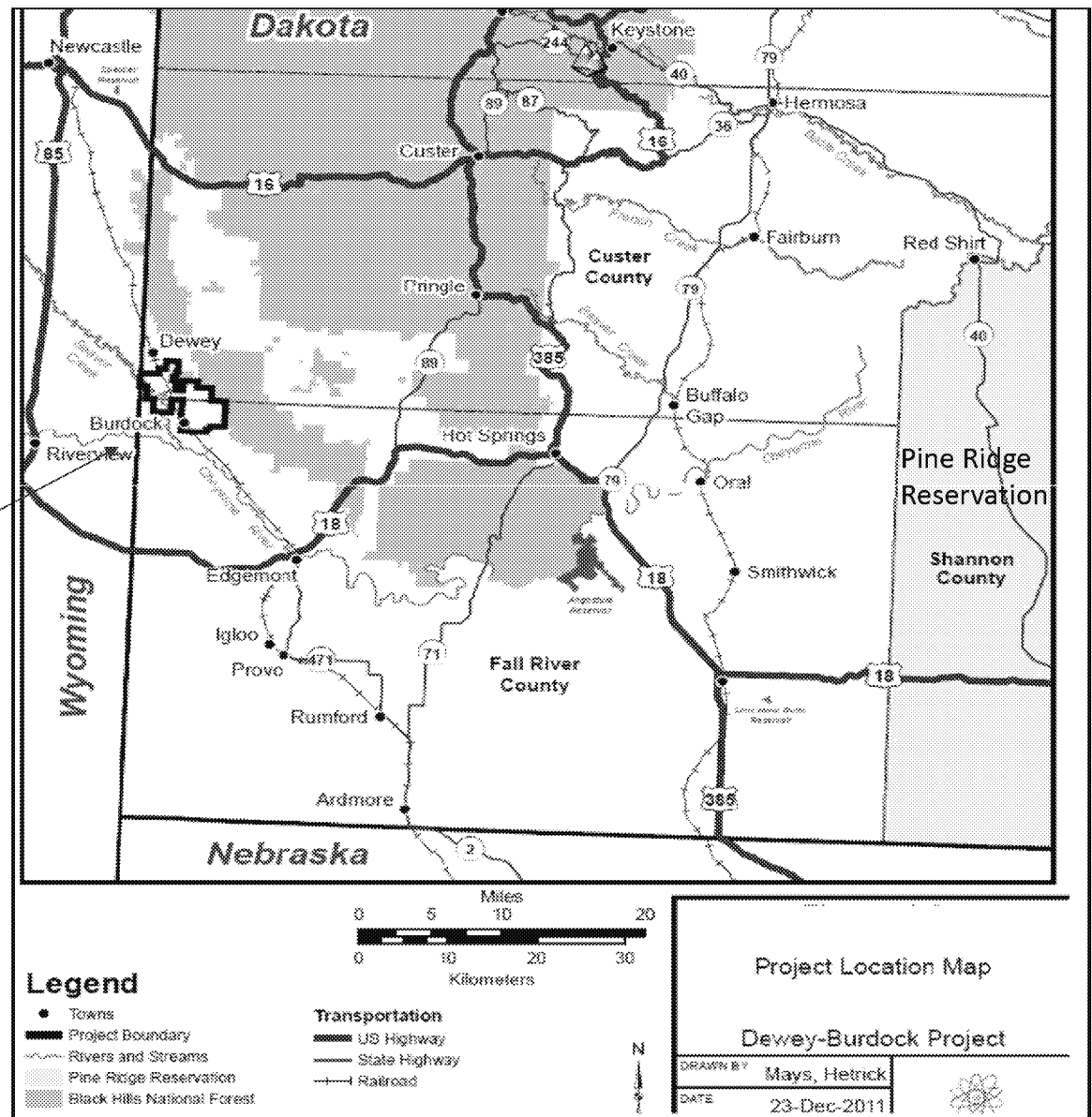


Figures for the Dewey-Burdock UIC Permits & Aquifer Exemption Brief

Dewey Burdock
Project Site

Figure 1. Location Map



DELIBERATIVE

Figure 2. Timeline for UIC Actions and Milestones

Completed

- ☒ Share Draft Permits/AE with OGWDW/OGC and brief OGWDW in Denver
- ☒ ESA: Assess/Document Species Impacts in draft USFWS consultation letter
- ☒ EP&R/ECEJ Review Class III Draft Permit Docs
- ☒ Brief RA for meeting with Powertech; RA meets with Powertech.
- ☒ EP&R Review of AE
- ☒ UIC ECEJ Review Class V Draft Permit Docs
- ☒ ESA: Draft consultation letter for internal review

April 1st

Next 30 days

- ☐ ESA: Send consultation letter to USFWS for concurrence
- ☐ NRC/Atomic Safety Licensing Board (ASLB) decision on NHPA (4/30)
- ☐ Brief RA: More detailed informational briefing on Permits/AE, CEA options, ESA and Tribal Consultation strategy
- ☐ Tribal Consultation: Plan communication with tribes to present EPA path forward for NHPA 106.

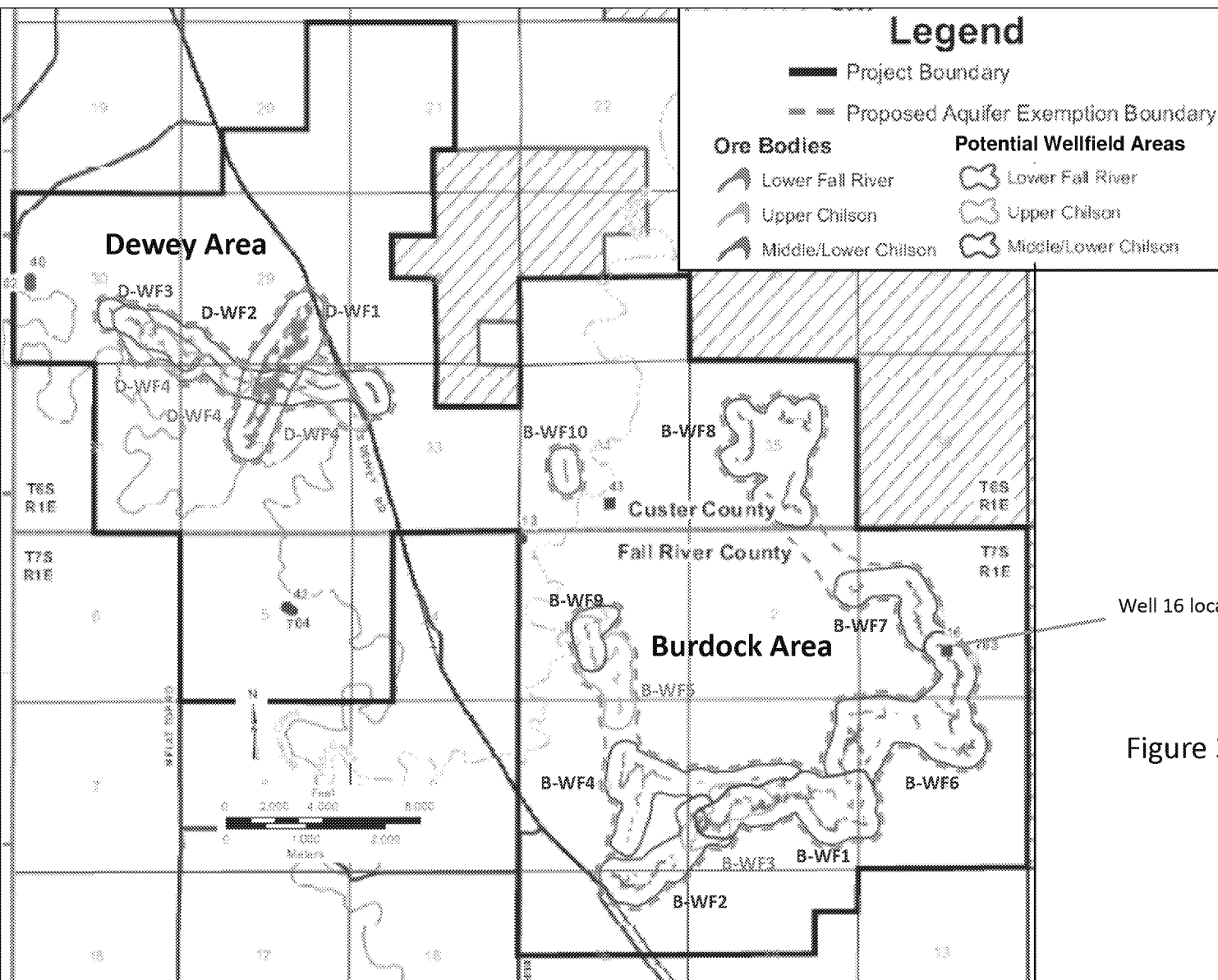
May 1st

Next 60 days

- ☐ Conclude ESA Consultation with USFWS concurrence
- ☐ RA visit to South Dakota (including Dewey-Burdock site visit)

Next 60 days +

- ☐ Brief RA: Permits/AE, Tribal Consultation, and ESA/NHPA decision recommendations
- ☐ Brief Tribes on NHPA compliance decision and begin general consultation
- ☐ Send General Consultation Invitation Letters
- ☐ Issue Draft Permits/AE Decision for 60 day comment period
- ☐ Hold two public hearings in SD



Ore Bodies




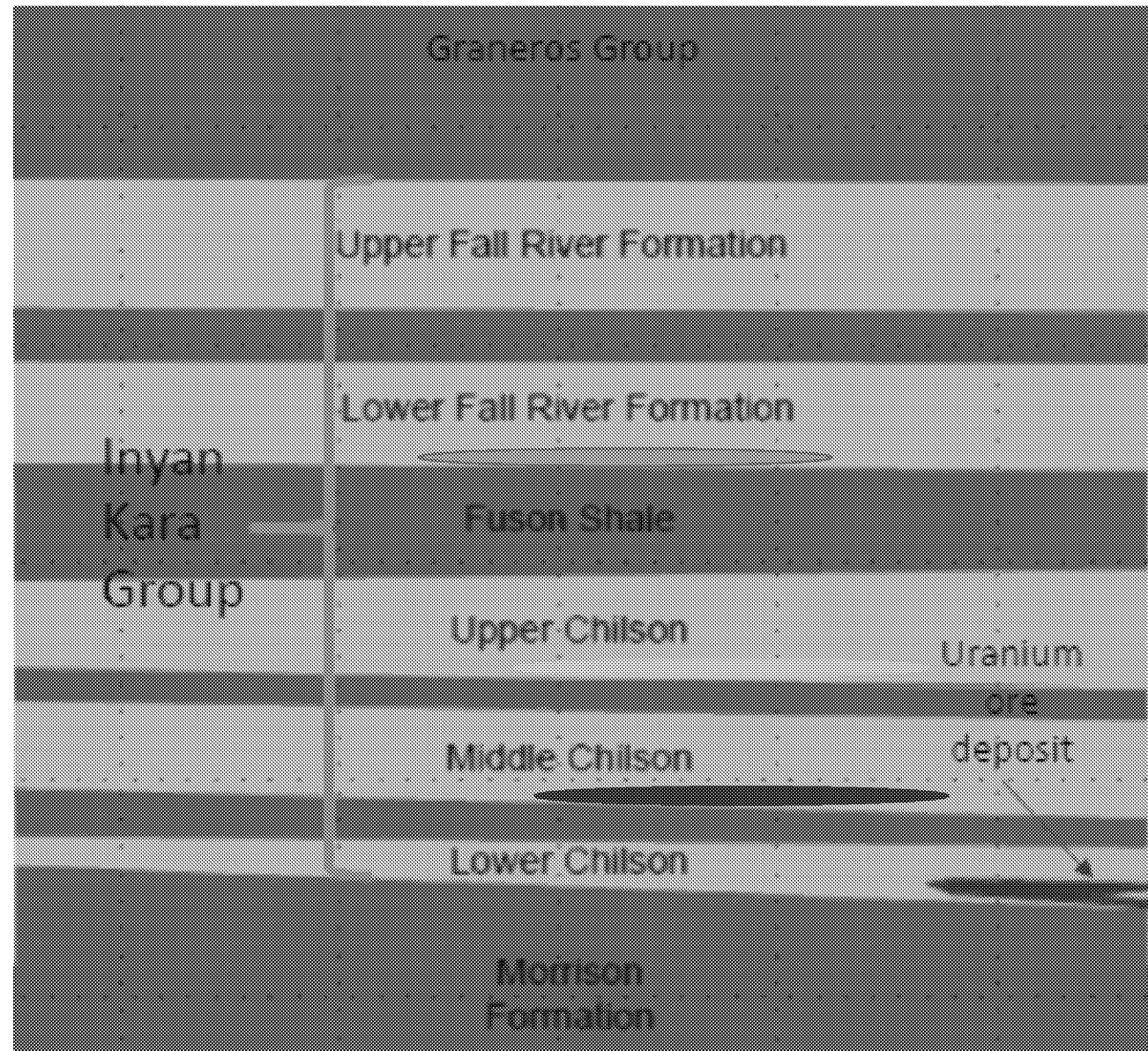
-  Lower Fall River
-  Upper Chilson
-  Middle/Lower Chilson

Figure 4. Vertical Extent of Aquifers Proposed for Exemption



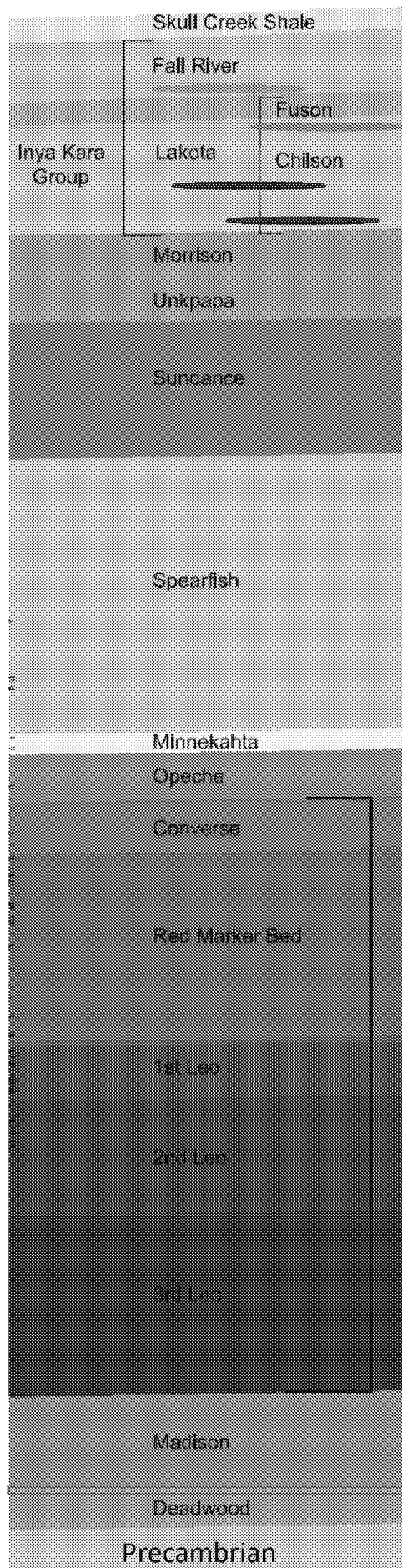


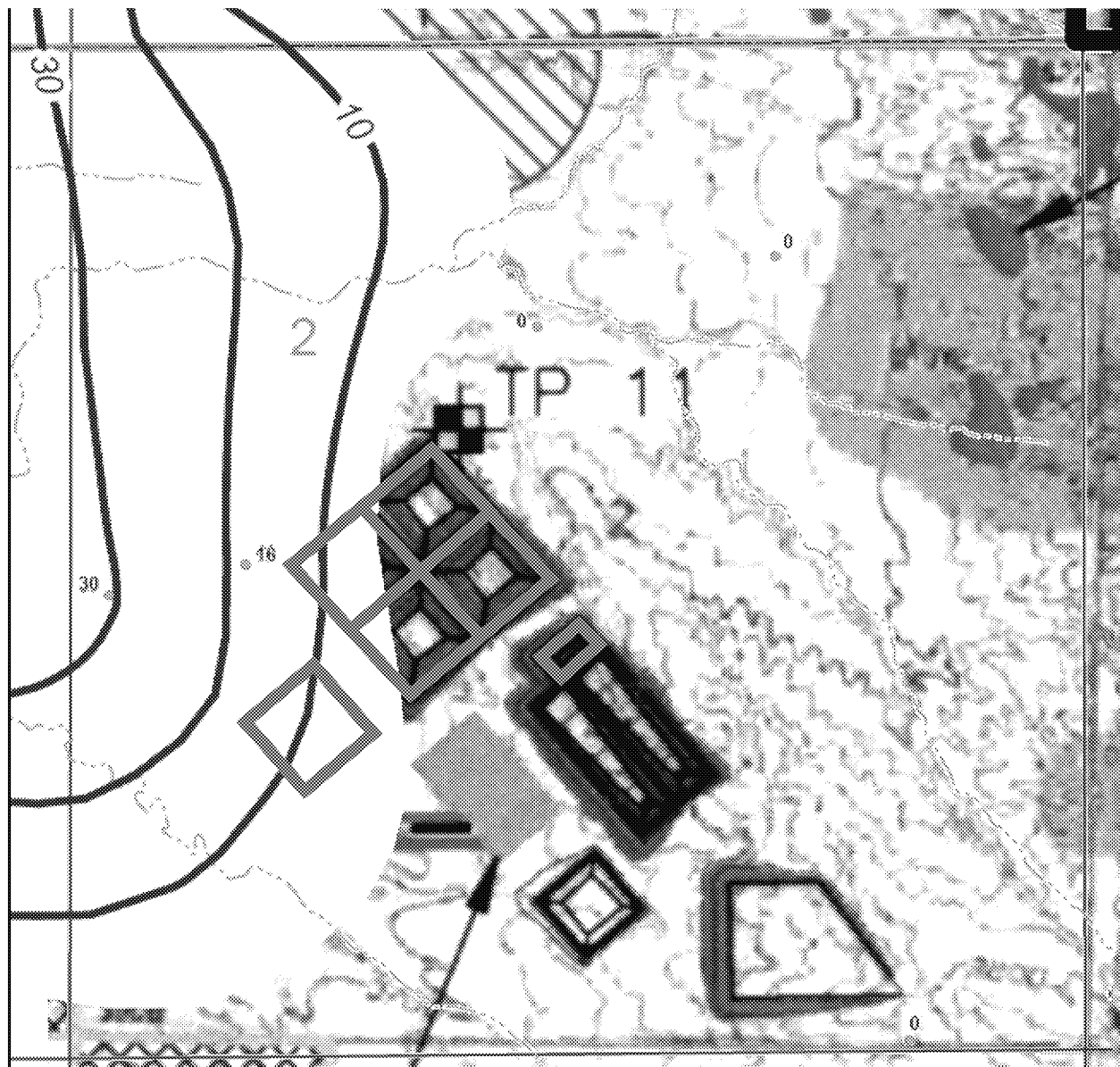
Figure 5. Stratigraphic Column at Dewey-Burdock Site Showing Class V Injection Zones

Minnelusa Injection Zone
~ 590 ft thick

Lower Minnelusa
Confining Zone
~ 560 ft thick


Madison USDW ~200 ft thick

Lower Madison Confining Zone ~100 ft thick
Englewood Confining Zone ~35 ft thick
Deadwood Injection Zone ~100 ft thick



Legend

 Permit Boundary

 Alluvium Thickness (feet)

Alluvium

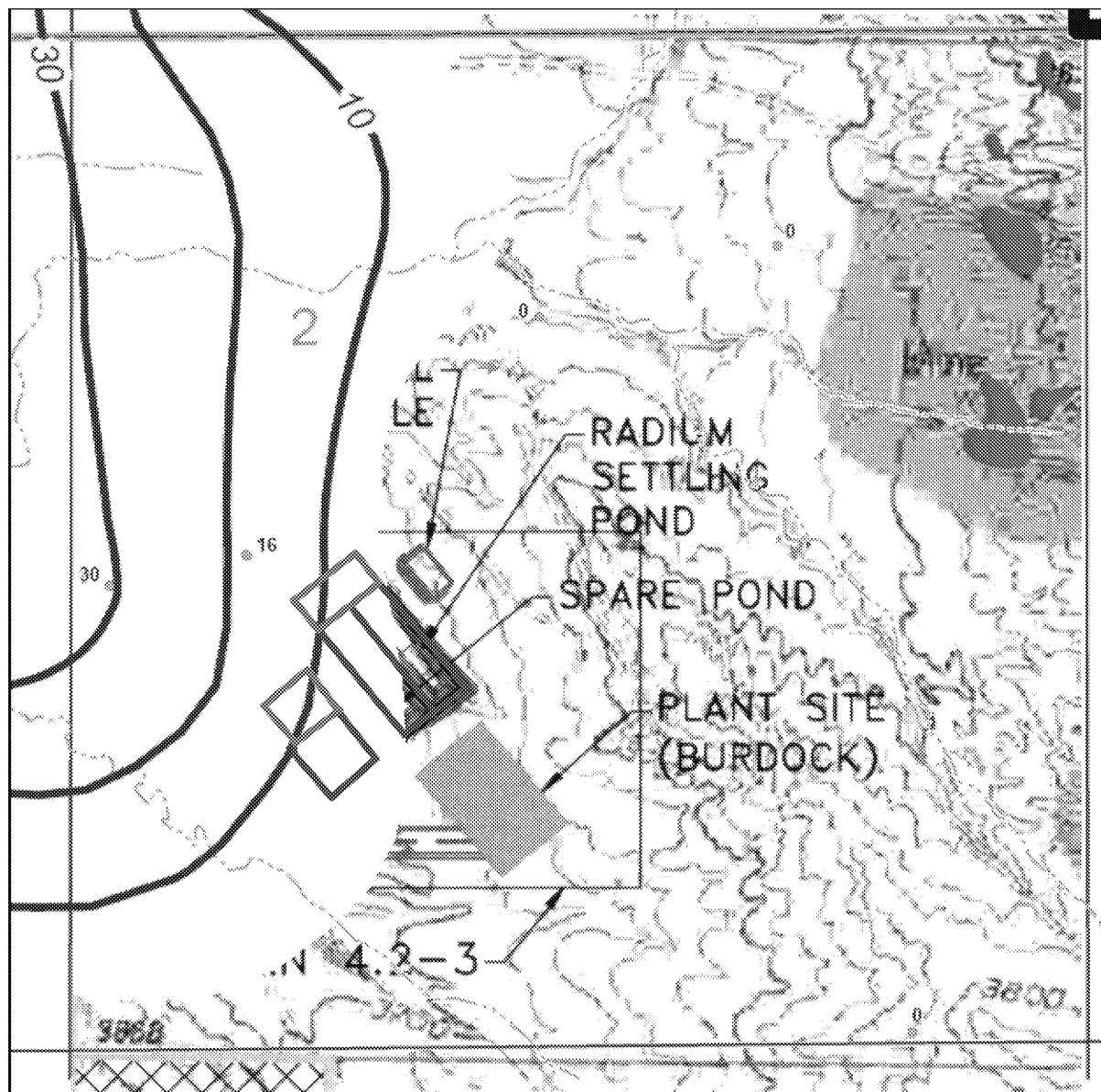


Pink outline indicates pond without a secondary HDPE liner on top of clay liner and without a leak detection system



Black outline indicates double-lined pond with leak detection system

Figure 6.
Burdock Area Ponds -
Land Application Scenario
for ISR Process Waste
Fluids



Legend

- Permit Boundary
- Alluvium Thickness (feet)
- Alluvium
- Pink outline indicates pond without a secondary HDPE liner on top of clay liner and without a leak detection system
- Blue outline indicates double-lined pond with leak detection system

Figure 7.
Burdock Area Ponds -
Deep Class V Disposal Well
Scenario for ISR Process
Waste Fluids

Legend

Alluvium



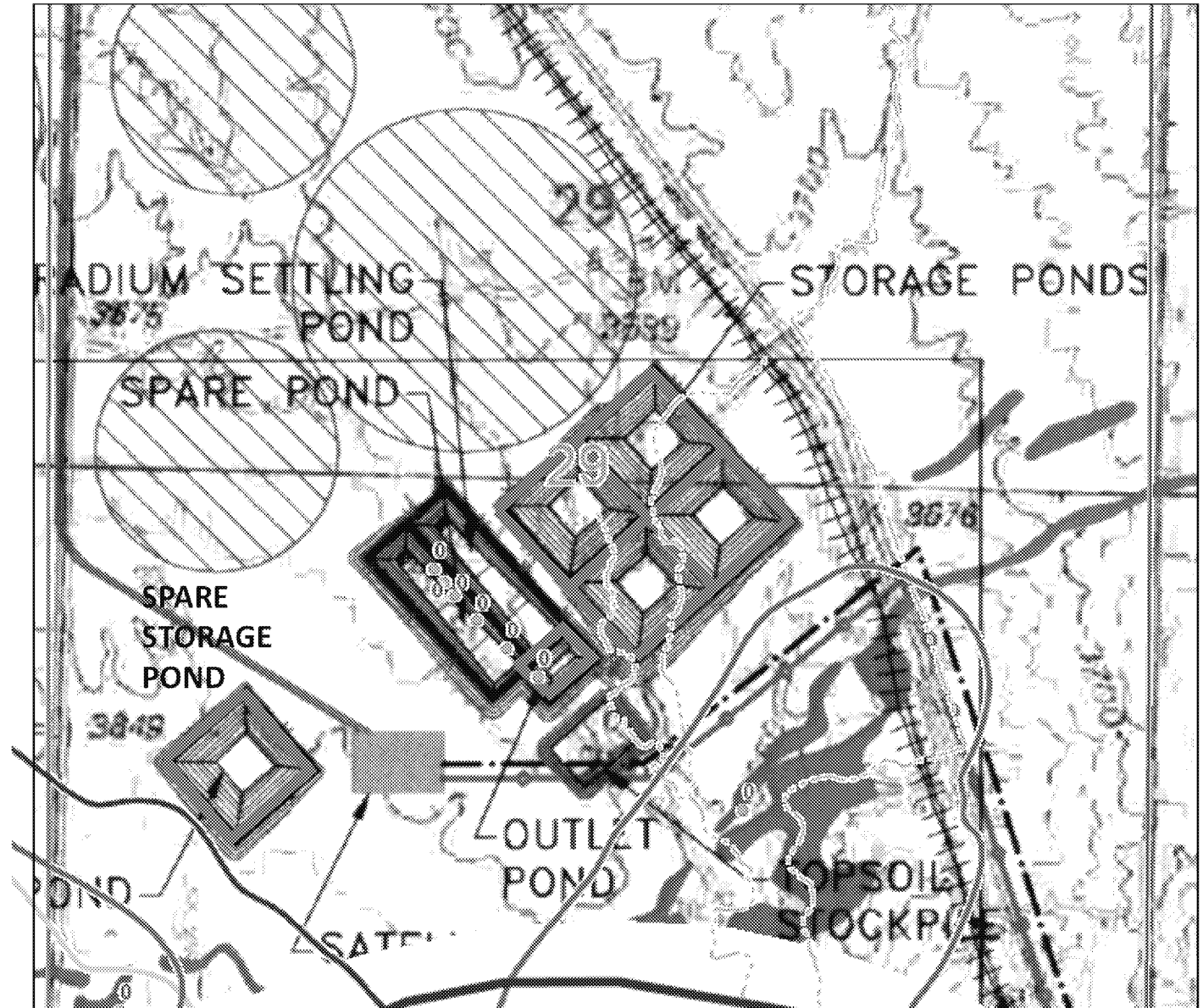
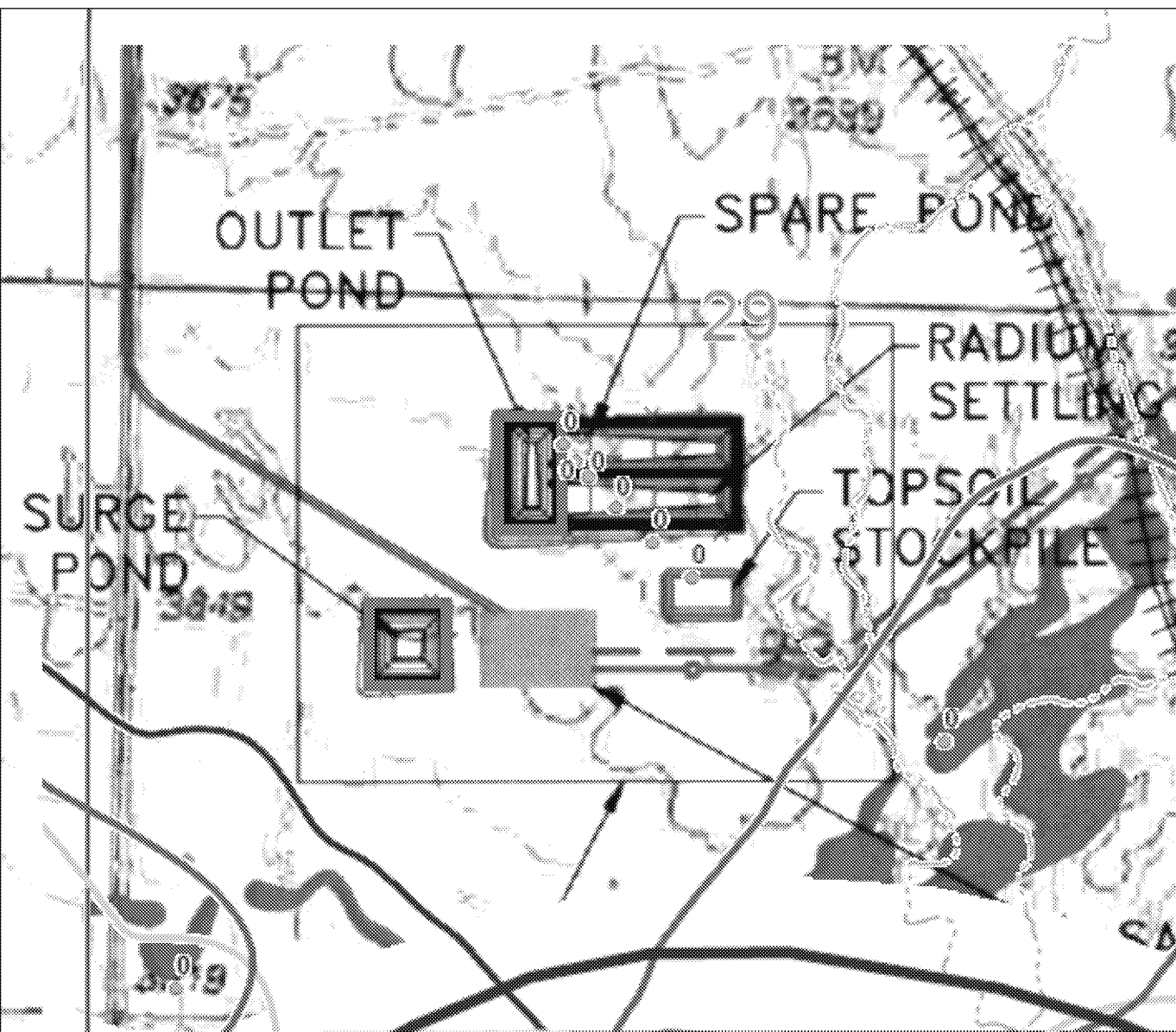
-  Pink outline indicates pond without a secondary HDPE liner on top of clay liner and without a leak detection system
-  Black outline indicates double-lined pond with leak detection system

Figure 8.
Dewey Area Ponds –
Land Application Scenario
for ISR Process Waste
Fluids





Legend

Alluvium



Pink outline indicates pond without a secondary HDPE liner on top of clay liner and without a leak detection system



Black outline indicates double-lined pond with leak detection system

Figure 9.
Dewey Area Ponds –
Deep Class V Disposal Well
Scenario for ISR Process
Waste Fluids